

Patent
Attorney's Docket No. 033703-001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)	
)	
Brian McGUIRE)	Group Art Unit: 2877
)	
Application No.: 09/972,896)	Examiner: Michael A. Lyons
)	
Filed: October 10, 2001)	Confirmation No.: 4470
)	
For: WIND SHEAR DETECTION)	
SYSTEM)	
)	
)	
)	

PROPOSED CLAIMS FOR DISCUSSION

1. (Currently amended) A method of detecting a windshear condition in a remote atmosphere in front of an aircraft, the method comprising the steps of:
 - (a) projecting a series of optical pulses into a remote atmosphere ahead of the aircraft;
 - (b) detecting backscattered light ~~a series of reflected optical responses~~ from the remote atmosphere corresponding to reflections from a series of ~~at least two predetermined~~ different distances in front of the aircraft greater than 200 meters away from the aircraft;
 - (c) processing said reflected responses from the remote atmosphere to determine a current relative wind speed at said series of ~~predetermined~~ distances in front of said aircraft;
 - (d) processing said current relative wind speeds to determine if a windshear event is present in the vicinity of the back scattering of said backscattered light ~~wind profile~~

Attorney's Docket No. 033703-001

Application No. 09/972,896

Page 2

~~indicating a windshear condition exists in front of said aircraft in the vicinity of the predetermined different distances.~~

11. (Currently amended) A method of detecting current wind velocity at a series of predetermined different distances exceeding 200 meters from an aircraft along a flight path of the aircraft and determining when differences in the detected wind velocities exceed a predetermined amount, the method comprising the steps of:

- (a) projecting a series of optical pulses into an atmosphere ahead of the aircraft;
- (b) detecting backscattered light ~~a series of reflected optical responses~~ from at least two positions in the remote atmosphere corresponding to reflections from a series of the predetermined distances in front of the aircraft greater than 200 meters away from the aircraft;
- (c) processing said ~~series of reflected optical responses~~ from the remote atmosphere to determine a current relative wind speed at said series of predetermined distances in front of said aircraft; and
- (d) processing said current relative wind speeds to determine if a windshear event is present in the vicinity of the back scattering of said backscattered light ~~alteration in the wind velocity exceeds said predetermined limit in front of said aircraft in the region of said reflections.~~